SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	53	54	55	56	57	58	59	60	61
ID No.	Process Flow / Activity	37 Line Port (DS0, Analog, ISLU) Disconnect	38 Channelized DS1 line port (TR-303-IDT) Install	39 Channelized DS1 line port (TR-303-IDT) Disconnect	40 Fiber Cross Connects Install (LGX)	41 Fiber Disconnect (LGX)	42 SS7 Links (DS0) Install	43 SS7 Links (DS0) Disconnect	44 SS7 Links (DS1) Install	45 SS7 Links (DS1) Disconnect
40	WFA/C updates NSDB									
41	WFA/C updates NSDB		X	X					X	X
42	PICS sends plug-in assignments to TIRKS								X	X
43	TIRKS provides equipment and facility assignments		X	X	X	X	X		X	
44	TIRKS inventories as spare and shows availabl for re-assignment (equipment & facility)							X		X
45	TIRKS updates SOAC		X	X	X	X	X	X	X	X
46	CPU time for NMA for PM data from test								X	X
47	***Pull and Analyze Order Steps***	X	X	X	X	X	X	X	X	X
48	Pull and analyze order: FCC; (copper%)	X								
49	Pull and analyze order: FCC; (copper% * (%_Non_Dedicated))									
50	Pull and analyze order: FMAC		X	X	X	X			X	X
51	Pull and analyze order: SS I&M/OSP									
52	Pull and analyze order: NTEC; (copper%)						X	X		
53	Pull and analyze order: NTEC									
54	Pull and analyze order: SSC						X	X		
55	***Travel Time Steps***	X	X	X	X	X	X	X	X	X
56	Travel time to the central office: CO non staffed, # orders per trip, Copper	X								
57	Travel time to the central office: CO non staffed, # orders per trip, Copper, %_Non_ Dedicated									
58	Travel time to the central office: CO non staffed, # orders per trip		X	X	X	X			X	X
59	Travel time to the central office: CO non staffed, # orders per trip: "R"									
60	Travel time to the central office: CO non staffed/orders per trip*Copper %									
61	Travel time to the central office: CO non staffed/orders per trip*Copper %						X	X		
62	Travel time to the central office: CO non staffed/orders per trip*Copper %: "R"									
63	Travel time to the central office: CO non staffed/orders per trip*Copper %									
64	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %						X	X		
65	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %: "R"									
66	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %								X	X
67	Travel time within the staffed central office: CO staffed/#orders per trip		X		X	X				
68	Travel time to FDI / 2 work activities									
69	Travel time to FDI / 1 work activities									
70	Travel time to customer premises / 1 work activity									
71	***Element Type Detail Steps***	X	X	X	X	X	X	X	X	X
72	**2 WIRE LOOP: Copper**									
73	Perform continuity test (check dial tone and ANI)									
74	Install cross connect from MDF to CFA appearance									
75	Install cross connect from MDF to CFA appearance									
76	Perform continuity test (check dial tone and ANI)									
77	ILEC MLT test and or ISTF test									
78	CLEC MLT test and or ISTF test									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	62	63	64	65
ID No.	Process Flow / Activity	46 SS7 STP global title translations 'A Link' only Install	47 SS7 STP global title translations 'A Link' only Disconnect	48 SS7 STP message transfer part 'A Link' only (port) Install	49 SS7 STP message transfer part 'A Link' only (port) Disconnect
40	~~Pre Order Steps~~ NSDB				
41	WFA/C updates NSDB				
42	PICS sends plug-in assignments to TIRKS				
43	TIRKS provides equipment and facility assignments				
44	TIRKS inventories as spare and shows availabl for re-assignment (equipment & facility)				
45	TIRKS updates SOAC				
46	CPU time for NMA for PM data from test				
47	***Pull and Analyze Order Steps***	X	X	X	X
48	Pull and analyze order: FCC; (copper%)				
49	Pull and analyze order: FCC; (copper% * (%_Non_Dedicated))				
50	Pull and analyze order: FMAC				
51	Pull and analyze order: SS I&M/OSP				
52	Pull and analyze order: NTEC; (copper%)				
53	Pull and analyze order: NTEC				
54	Pull and analyze order: SSC	X	X	X	X
55	***Travel Time Steps***				
56	Travel time to the central office: CO non staffed, # orders per trip, Copper				
57	Travel time to the central office: CO non staffed, # orders per trip, Copper, %_Non_ Dedicated				
58	Travel time to the central office: CO non staffed, # orders per trip				
59	Travel time to the central office: CO non staffed, # orders per trip: "R"				
60	Travel time to the central office: CO non staffed/orders per trip*Copper %				
61	Travel time to the central office: CO non staffed/orders per trip*Copper %				
62	Travel time to the central office: CO non staffed/orders per trip*Copper %: "R"				
63	Travel time to the central office: CO non staffed/orders per trip*Copper %				
64	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %				
65	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %: "R"				
66	Travel time within the staffed central office: CO staffed/#orders per trip*Copper %				
67	Travel time within the staffed central office: CO staffed/#orders per trip				
68	Travel time to FDI / 2 work activities				
69	Travel time to FDI / 1 work activities				
70	Travel time to customer premises / 1 work activity				
71	***Element Type Detail Steps***	X	X	X	X
72	**2 WIRE LOOP: Copper**				
73	Perform continuity test (check dial tone and ANI)				
74	Install cross connect from MDF to CFA appearance				
75	Install cross connect from MDF to CFA appearance				
76	Perform continuity test (check dial tone and ANI)				
77	ILEC MLT test and or ISTF test				
78	CLEC MLT test and or ISTF test				

SERVICE ORDER PROCESS / NON-RECURRING TYPE MATRIX

1	2	15	16	17	18	19	20	21	22	23
ID No.	Process Flow / Activity	1 POTS / ISDN BRI Migration (TSR)	2 POTS / ISDN BRI Install (TSR)	3 POTS / ISDN BRI Migration (UNE Platform)	4 POTS / ISDN BRI Install (UNE Platform)	5 POTS / ISDN BRI Disconnect (TSR / UNE Platform)	6 POTS / ISDN BRI Migration (UNE Loop)	7 POTS / ISDN BRI Install (UNE Loop)	8 POTS / ISDN BRI Disconnect (UNE Loop)	9 Feature Changes
79	Remove jumper from MDF								X	
80	Remove jumper from MDF									
81	**2 WIRE LOOP: IDLC (GR-303)**									
82	Install DSO TSI at RT (CPU time)						X	X		
83	NCTE installation & testing									
84	Remove DSO TSI at RT (CPU Time)								X	
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**									
86	Install IDT line port card									
87	Install DSX cross connect (5 Wire)									
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
89	Remove DSX cross connect (5 Wire)									
90	CPU time at SONET MUX (DS1)									
91	CPU time at RT (DS1 TSI)									
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
93	CPU Time at SONET MUX (DS1)									
94	CPU Time at RT (DS1 TSI)									
95	Remove DSX cross connect (5 Wire)									
96	**FIBER CROSS CONNECT**									
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system									
100	**2 WIRE CROSS CONNECT AT THE FDI**									
101	Setup time / 2 work activities									
102	Perform continuity test for ILEC									
103	Install cross connect (Binding Post)									
104	Tear down setup / 2 work activities									
105	Setup time / 2 work activities									
106	Perform continuity test for ILEC									
107	Remove existing cross connect (Binding Post)									
108	Tear down setup / 2 work activities									
109	**4 WIRE CROSS CONNECT AT THE FDI**									
110	Negotiate customer release (CLEC to ILEC)									
111	Setup time / 1 work activity									
112	Install cross connect (Binding Post)									
113	Tear down setup / 1 work activity									
114	Remove SMAS (wire wrap)									
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
116	Setup time / 2 work activities									
117	Remove existing cross connect (Binding Post)									
118	Tear down setup / 2 work activities									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	24	25	26	27	28	29	30	31	32
ID No.	Process Flow / Activity	10 4 Wire Migration (UNE Loop)	11 4 Wire Install (UNE Loop)	12 4 Wire Disconnect (UNE Loop)	13 2 Wire Migration at the FDI	14 2 Wire Disconnect at the FDI	15 4 Wire Migration at the FDI	16 4 Wire Disconnect at the FDI	17 2 Wire Migration at the NID	18 Channelized DS1 (Virtual Feeder to IDT Install)
79	Remove jumper from MDF									
80	Remove jumper from MDF									
81	**2 WIRE LOOP: IDLC (GR-303)**									
82	Install DSO TSI at RT (CPU time)		X							
83	NCTE installation & testing		X							
84	Remove DSO TSI at RT (CPU Time)									
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**									
86	Install IDT line port card									
87	Install DSX cross connect (5 Wire)									X
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
89	Remove DSX cross connect (5 Wire)									
90	CPU time at SONET MUX (DS1)									X
91	CPU time at RT (DS1 TSI)									X
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									X
93	CPU Time at SONET MUX (DS1)									
94	CPU Time at RT (DS1 TSI)									
95	Remove DSX cross connect (5 Wire)									
96	**FIBER CROSS CONNECT**									
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system									
100	**2 WIRE CROSS CONNECT AT THE FDI**									
101	Setup time / 2 work activities				X					
102	Perform continuity test for ILEC				X					
103	Install cross connect (Binding Post)				X					
104	Tear down setup / 2 work activities				X					
105	Setup time / 2 work activities					X				
106	Perform continuity test for ILEC					X				
107	Remove existing cross connect (Binding Post)					X				
108	Tear down setup / 2 work activities					X				
109	**4 WIRE CROSS CONNECT AT THE FDI**									
110	Negotiate customer release (CLEC to ILEC)						X			
111	Setup time / 1 work activity						X			
112	Install cross connect (Binding Post)						X			
113	Tear down setup / 1 work activity						X			
114	Remove SMAS (wire wrap)						X			
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)						X			
116	Setup time / 2 work activities							X		
117	Remove existing cross connect (Binding Post)							X		
118	Tear down setup / 2 work activities							X		

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	33	34	35	36	37	38	39	40	41
ID No.	Process Flow / Activity	19 Channelized DS1 Virtual Feeder to RT Disconnect	20 DS1 Interoffice Transport Install	21 DS1 Interoffice Transport Disconnect	22 DS3 Interoffice Transport Install	23 DS3 Interoffice Transport Disconnect	24 2 Wire Loop, different CO Migration	25 2 Wire Loop, different CO Install	26 2 Wire Loop, different CO Disconnect	27 4 Wire Loop, different CO Migration
79	Pre-Order Steps									
80	Remove jumper from MDF						X			
81	**2 WIRE LOOP: IDLC (GR-303)**									
82	Install DSO TSI at RT (CPU time)									
83	NCTE installation & testing									
84	Remove DSO TSI at RT (CPU Time)									
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**									
86	Install IDT line port card									
87	Install DSX cross connect (5 Wire)									
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
89	Remove DSX cross connect (5 Wire)									
90	CPU time at SONET MUX (DS1)									
91	CPU time at RT (DS1 TSI)									
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
93	CPU Time at SONET MUX (DS1)	X								
94	CPU Time at RT (DS1 TSI)	X								
95	Remove DSX cross connect (5 Wire)	X								
96	**FIBER CROSS CONNECT**									
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system									
100	**2 WIRE CROSS CONNECT AT THE FDI**									
101	Setup time / 2 work activities									
102	Perform continuity test for ILEC									
103	Install cross connect (Binding Post)									
104	Tear down setup / 2 work activities									
105	Setup time / 2 work activities									
106	Perform continuity test for ILEC									
107	Remove existing cross connect (Binding Post)									
108	Tear down setup / 2 work activities									
109	**4 WIRE CROSS CONNECT AT THE FDI**									
110	Negotiate customer release (CLEC to ILEC)									
111	Setup time / 1 work activity									
112	Install cross connect (Binding Post)									
113	Tear down setup / 1 work activity									
114	Remove SMAS (wire wrap)									
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
116	Setup time / 2 work activities									
117	Remove existing cross connect (Binding Post)									
118	Tear down setup / 2 work activities									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	42	43	44	45	48	49	50	51	52
ID No.	Process Flow / Activity	28 4 Wire Loop, different CO Install	29 4 Wire Loop, different CO Disconnect	30 DS1 Loop to Customer Premise Migration	31 DS1 Loop to Customer Premise Install	32 DS1 Loop to Customer Premise Disconnect	33 DS3 Loop to Customer Premise Migration	34 DS3 Loop to Customer Premise Install	35 DS3 Loop to Customer Premise Disconnect	36 Line Port (DS0, Analog, SLU) Install
79	Record jumper from MDF									
80	Remove jumper from MDF									
81	**2 WIRE LOOP: IDLC (GR-303)**									
82	Install DSO TSI at RT (CPU time)									
83	NCTE installation & testing									
84	Remove DSO TSI at RT (CPU Time)									
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**									
86	Install IDT line port card									
87	Install DSX cross connect (5 Wire)									
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
89	Remove DSX cross connect (5 Wire)									
90	CPU time at SONET MUX (DS1)									
91	CPU time at RT (DS1 TSI)									
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
93	CPU Time at SONET MUX (DS1)									
94	CPU Time at RT (DS1 TSI)									
95	Remove DSX cross connect (5 Wire)									
96	**FIBER CROSS CONNECT**									
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)									
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system									
100	**2 WIRE CROSS CONNECT AT THE FDI**									
101	Setup time / 2 work activities									
102	Perform continuity test for ILEC									
103	Install cross connect (Binding Post)									
104	Tear down setup / 2 work activities									
105	Setup time / 2 work activities									
106	Perform continuity test for ILEC									
107	Remove existing cross connect (Binding Post)									
108	Tear down setup / 2 work activities									
109	**4 WIRE CROSS CONNECT AT THE FDI**									
110	Negotiate customer release (CLEC to ILEC)									
111	Setup time / 1 work activity									
112	Install cross connect (Binding Post)									
113	Tear down setup / 1 work activity									
114	Remove SMAS (wire wrap)									
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
116	Setup time / 2 work activities									
117	Remove existing cross connect (Binding Post)									
118	Tear down setup / 2 work activities									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	53	54	55	56	57	58	59	60	61
ID No.	Process Flow / Activity	37 Line Port (DS0, Analog, ISLU) Disconnect	38 Channelized DS1 line port (TR-303-IDT) Install	39 Channelized DS1 line port (TR-303-IDT) Disconnect	40 Fiber Cross Connects Install (LGX)	41 Fiber Disconnect (LGX)	42 SS7 Links (DS0) Install	43 SS7 Links (DS0) Disconnect	44 SS7 Links (DS1) Install	45 SS7 Links (DS1) Disconnect
79	Pre-Order Steps	X								
80	Remove jumper from MDF									
81	**2 WIRE LOOP: IDLC (GR-303)**									
82	Install DSO TSI at RT (CPU time)									
83	NCTE installation & testing									
84	Remove DSO TSI at RT (CPU Time)									
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**									
86	Install IDT line port card		X							
87	Install DSX cross connect (5 Wire)		X							
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU		X							
89	Remove DSX cross connect (5 Wire)			X						
90	CPU time at SONET MUX (DS1)									
91	CPU time at RT (DS1 TSI)									
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
93	CPU Time at SONET MUX (DS1)									
94	CPU Time at RT (DS1 TSI)									
95	Remove DSX cross connect (5 Wire)									
96	**FIBER CROSS CONNECT**									
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)				X					
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)					X				
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system				X					
100	**2 WIRE CROSS CONNECT AT THE FDI**									
101	Setup time / 2 work activities									
102	Perform continuity test for ILEC									
103	Install cross connect (Binding Post)									
104	Tear down setup / 2 work activities									
105	Setup time / 2 work activities									
106	Perform continuity test for ILEC									
107	Remove existing cross connect (Binding Post)									
108	Tear down setup / 2 work activities									
109	**4 WIRE CROSS CONNECT AT THE FDI**									
110	Negotiate customer release (CLEC to ILEC)									
111	Setup time / 1 work activity									
112	Install cross connect (Binding Post)									
113	Tear down setup / 1 work activity									
114	Remove SMAS (wire wrap)									
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
116	Setup time / 2 work activities									
117	Remove existing cross connect (Binding Post)									
118	Tear down setup / 2 work activities									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	62	63	64	65
ID No.	Process Flow / Activity	46 SS7 STP global title translations 'A Link' only Install	47 SS7 STP global title translations 'A Link' only Disconnect	48 SS7 STP message transfer part 'A Link' only (port) Install	49 SS7 STP message transfer part 'A Link' only (port) Disconnect
79	Remove jumper from MDF				
80	Remove jumper from MDF				
81	**2 WIRE LOOP: IDLC (GR-303)**				
82	Install DSO TSI at RT (CPU time)				
83	NCTE installation & testing				
84	Remove DSO TSI at RT (CPU Time)				
85	**CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)**				
86	Install IDT line port card				
87	Install DSX cross connect (5 Wire)				
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU				
89	Remove DSX cross connect (5 Wire)				
90	CPU time at SONET MUX (DS1)				
91	CPU time at RT (DS1 TSI)				
92	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU				
93	CPU Time at SONET MUX (DS1)				
94	CPU Time at RT (DS1 TSI)				
95	Remove DSX cross connect (5 Wire)				
96	**FIBER CROSS CONNECT**				
97	Install 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)				
98	Remove 2 Fiber cross connects at LGX (2 minutes x 2 Fiber cross connects at LGX)				
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system				
100	**2 WIRE CROSS CONNECT AT THE FDI**				
101	Setup time / 2 work activities				
102	Perform continuity test for ILEC				
103	Install cross connect (Binding Post)				
104	Tear down setup / 2 work activities				
105	Setup time / 2 work activities				
106	Perform continuity test for ILEC				
107	Remove existing cross connect (Binding Post)				
108	Tear down setup / 2 work activities				
109	**4 WIRE CROSS CONNECT AT THE FDI**				
110	Negotiate customer release (CLEC to ILEC)				
111	Setup time / 1 work activity				
112	Install cross connect (Binding Post)				
113	Tear down setup / 1 work activity				
114	Remove SMAS (wire wrap)				
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)				
116	Setup time / 2 work activities				
117	Remove existing cross connect (Binding Post)				
118	Tear down setup / 2 work activities				

SERVICE ORDER PROCESS / NON-RECURRING TYPE MATRIX

1	2	15	16	17	18	19	20	21	22	23
ID No.	Process Flow / Activity	1 POTS / ISDN BRI Migration (TSR)	2 POTS / ISDN BRI Install (TSR)	3 POTS / ISDN BRI Migration (UNE Platform)	4 POTS / ISDN BRI Install (UNE Platform)	5 POTS / ISDN BRI Disconnect (TSR / UNE Platform)	6 POTS / ISDN BRI Migration (UNE Loop)	7 POTS / ISDN BRI Install (UNE Loop)	8 POTS / ISDN BRI Disconnect (UNE Loop)	9 Feature Changes
119	**4 WIRE LOOP and OTHER DESIGNED SERVICES**									
120	Negotiate customer release (CLEC to ILEC)									
121	Monitor circuit for traffic busy and correct assignment									
122	Monitor circuit for traffic busy and correct assignment									
123	NTEC contacts SSC to verify valid disconnect									
124	SS I&M OSP contacts SSC to verify valid disconnect									
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)									
129	Perform continuity test (check dial tone and ANI)									
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)									
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)									
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)									
133	Install channel unit at AD4 (Z Office)									
134	DCS CPU Time (A Office)									
135	Install CSU/DSU at STP									
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									
139	Install DSX cross connect (5 wire)									
140	Remove DSX wire cross connect (5 wire, existing ILEC service)									
141	Remove DSX cross connect (5 wire)									
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
143	Install plug-in at RT									
144	Install plug-in at ADM									
145	Install DS1 Smart Jack (Intelligent RJ48)									
146	Install Cross connect (4 wire SMAS, wire wrap)									
147	Perform DDS testing									
148	Perform loop back analysis test									
149	Perform DDS latching loop back test									
150	Perform testing (1000 Hz.)									
151	Perform continuity test (check dial tone and ANI)									
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)									
153	Remove SMAS (wire wrap)									
154	Remove SMAS (wire wrap)									
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
157	**SIMPLE CROSS CONNECT AT THE NID**									
158	Customer contact to gain access									
159	Setup time / 1 work activity									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	24	25	26	27	28	29	30	31	32
ID No.	Process Flow / Activity	10 4 Wire Migration (UNE Loop)	11 4 Wire Install (UNE Loop)	12 4 Wire Disconnect (UNE Loop)	13 2 Wire Migration at the FDI	14 2 Wire Disconnect at the FDI	15 4 Wire Migration at the FDI	16 4 Wire Disconnect at the FDI	17 2 Wire Migration at the NID	18 Channelized DS1 Virtual Feeder to RT Install
119	**Provision Steps OTHER DESIGNED SERVICES**									
120	Negotiate customer release (CLEC to ILEC)	X								
121	Monitor circuit for traffic busy and correct assignment	X		X						
122	Monitor circuit for traffic busy and correct assignment									
123	NTEC contacts SSC to verify valid disconnect			X						
124	SS I&M OSP contacts SSC to verify valid disconnect							X		
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)	X								
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)		X							
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)									
129	Perform continuity test (check dial tone and ANI)									
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)									
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)									
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)									
133	Install channel unit at AD4 (Z Office)									
134	DCS CPU Time (A Office)									
135	Install CSU/DSU at STP									
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									
139	Install DSX cross connect (5 wire)									
140	Remove DSX wire cross connect (5 wire, existing ILEC service)									
141	Remove DSX cross connect (5 wire)									
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
143	Install plug-in at RT									
144	Install plug-in at ADM									
145	Install DS1 Smart Jack (Intelligent RJ48)									
146	Install Cross connect (4 wire SMAS, wire wrap)		X							
147	Perform DDS testing									
148	Perform loop back analysis test									
149	Perform DDS latching loop back test									
150	Perform testing (1000 Hz.)	X	X							
151	Perform continuity test (check dial tone and ANI)									
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)		X							
153	Remove SMAS (wire wrap)			X						
154	Remove SMAS (wire wrap)									
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)			X						
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)	X								
157	**SIMPLE CROSS CONNECT AT THE NID**									
158	Customer contact to gain access								X	
159	Setup time / 1 work activity								X	

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	33	34	35	36	37	38	39	40	41
ID No.	Process Flow / Activity	19 Channelized DS1 Virtual Feeder to RT Disconnect	20 DS1 Interoffice Transport Install	21 DS1 Interoffice Transport Disconnect	22 DS3 Interoffice Transport Install	23 DS3 Interoffice Transport Disconnect	24 2 Wire Loop different CO Migration	25 2 Wire Loop different CO Install	26 2 Wire Loop different CO Disconnect	27 4 Wire Loop different CO Migration
119	Pre-Order Steps OTHER DESIGNED SERVICES									
120	Negotiate customer release (CLEC to ILEC)						X			X
121	Monitor circuit for traffic busy and correct assignment						X		X	X
122	Monitor circuit for traffic busy and correct assignment									
123	NTEC contacts SSC to verify valid disconnect									
124	SS I&M OSP contacts SSC to verify valid disconnect									
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									X
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)									
129	Perform continuity test (check dial tone and ANI)						X			
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)						X	X		
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)						X	X		
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)								X	
133	Install channel unit at AD4 (Z Office)						X	X		X
134	DCS CPU Time (A Office)						X	X		X
135	Install CSU/DSU at STP									
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									X
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)									
139	Install DSX cross connect (5 wire)									
140	Remove DSX wire cross connect (5 wire, existing ILEC service)									
141	Remove DSX cross connect (5 wire)									
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
143	Install plug-in at RT									
144	Install plug-in at ADM									
145	Install DS1 Smart Jack (Intelligent RJ48)									
146	Install Cross connect (4 wire SMAS, wire wrap)									
147	Perform DDS testing									
148	Perform loop back analysis test									
149	Perform DDS latching loop back test									
150	Perform testing (1000 Hz.)						X	X		X
151	Perform continuity test (check dial tone and ANI)						X	X		
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)									
153	Remove SMAS (wire wrap)									
154	Remove SMAS (wire wrap)									X
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									X
157	SIMPLE CROSS CONNECT AT THE NID									
158	Customer contact to gain access									
159	Setup time / 1 work activity									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	42	43	44	45	48	49	50	51	52
ID No.	Process Flow / Activity	28 4 Wire Loop, different CO Install	29 4 Wire Loop, different CO Disconnect	30 DS1 Loop to Customer Premise Migration	31 DS1 Loop to Customer Premise Install	32 DS1 Loop to Customer Premise Disconnect	33 DS3 Loop to Customer Premise Migration	34 DS3 Loop to Customer Premise Install	35 DS3 Loop to Customer Premise Disconnect	36 Line Port (DS0 Analog SLU) Install
119	**Preorder Steps and OTHER DESIGNED SERVICES**									
120	Negotiate customer release (CLEC to ILEC)			X			X			
121	Monitor circuit for traffic busy and correct assignment		X							
122	Monitor circuit for traffic busy and correct assignment			X		X	X		X	
123	NTEC contacts SSC to verify valid disconnect									
124	SS I&M OSP contacts SSC to verify valid disconnect									
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)	X								
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)		X							
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)									
129	Perform continuity test (check dial tone and ANI)									
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)									
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)									
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)									
133	Install channel unit at AD4 (Z Office)	X								
134	DCS CPU Time (A Office)	X								
135	Install CSU/DSU at STP									
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)	X								
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)		X							
139	Install DSX cross connect (5 wire)			X	X					
140	Remove DSX wire cross connect (5 wire, existing ILEC service)			X						
141	Remove DSX cross connect (5 wire)					X				
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU			X	X					
143	Install plug-in at RT				X					
144	Install plug-in at ADM				X					
145	Install DS1 Smart Jack (Intelligent RJ48)				X					
146	Install Cross connect (4 wire SMAS, wire wrap)									
147	Perform DDS testing									
148	Perform loop back analysis test				X					
149	Perform DDS latching loop back test									
150	Perform testing (1000 Hz.)	X								
151	Perform continuity test (check dial tone and ANI)									
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)									
153	Remove SMAS (wire wrap)									
154	Remove SMAS (wire wrap)									
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
157	**SIMPLE CROSS CONNECT AT THE NID**									
158	Customer contact to gain access									
159	Setup time / 1 work activity									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	53	54	55	56	57	58	59	60	61
ID No.	Process Flow / Activity	37 Line Port (DS0, Analog, ISLU) Disconnect	38 Channelized DS1 line port (TR-303-IDT) Install	39 Channelized DS1 line port (TR-303-IDT) Disconnect	40 Fiber Cross Connects Install (LGX)	41 Fiber Disconnect (LGX)	42 SS7 Links (DS0) Install	43 SS7 Links (DS0) Disconnect	44 SS7 Links (DS1) Install	45 SS7 Links (DS1) Disconnect
119	**Pre-Order Steps OTHER DESIGNED SERVICES**									
120	Negotiate customer release (CLEC to ILEC)									
121	Monitor circuit for traffic busy and correct assignment							X		
122	Monitor circuit for traffic busy and correct assignment			X		X				X
123	NTEC contacts SSC to verify valid disconnect									
124	SS I&M OSP contacts SSC to verify valid disconnect									
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)									
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)									
129	Perform continuity test (check dial tone and ANI)									
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)									
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)									
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)									
133	Install channel unit at AD4 (Z Office)						X			
134	DCS CPU Time (A Office)						X			
135	Install CSU/DSU at STP						X			
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)									
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)						X			
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)							X		
139	Install DSX cross connect (5 wire)									
140	Remove DSX wire cross connect (5 wire, existing ILEC service)									
141	Remove DSX cross connect (5 wire)									
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
143	Install plug-in at RT									
144	Install plug-in at ADM									
145	Install DS1 Smart Jack (Intelligent RJ48)									
146	Install Cross connect (4 wire SMAS, wire wrap)									
147	Perform DDS testing						X			
148	Perform loop back analysis test									
149	Perform DDS latching loop back test						X			
150	Perform testing (1000 Hz.)									
151	Perform continuity test (check dial tone and ANI)									
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)									
153	Remove SMAS (wire wrap)									
154	Remove SMAS (wire wrap)									
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)									
157	**SIMPLE CROSS CONNECT AT THE NID**									
158	Customer contact to gain access									
159	Setup time / 1 work activity									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	62	63	64	65
ID No.	Process Flow / Activity	46 SS7 STP global title translations 'A Link' only Install	47 SS7 STP global title translations 'A Link' only Disconnect	48 SS7 STP message transfer part 'A Link' only (port) Install	49 SS7 STP message transfer part 'A Link' only (port) Disconnect
119	PreOrder Steps OTHER DESIGNED SERVICES				
120	Negotiate customer release (CLEC to ILEC)				
121	Monitor circuit for traffic busy and correct assignment				
122	Monitor circuit for traffic busy and correct assignment				
123	NTEC contacts SSC to verify valid disconnect				
124	SS I&M OSP contacts SSC to verify valid disconnect				
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)				
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)				
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)				
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumper)				
129	Perform continuity test (check dial tone and ANI)				
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)				
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)				
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)				
133	Install channel unit at AD4 (Z Office)				
134	DCS CPU Time (A Office)				
135	Install CSU/DSU at STP				
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)				
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)				
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)				
139	Install DSX cross connect (5 wire)				
140	Remove DSX wire cross connect (5 wire, existing ILEC service)				
141	Remove DSX cross connect (5 wire)				
142	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU				
143	Install plug-in at RT				
144	Install plug-in at ADM				
145	Install DS1 Smart Jack (Intelligent RJ48)				
146	Install Cross connect (4 wire SMAS, wire wrap)				
147	Perform DDS testing				
148	Perform loop back analysis test				
149	Perform DDS latching loop back test				
150	Perform testing (1000 Hz.)				
151	Perform continuity test (check dial tone and ANI)				
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)				
153	Remove SMAS (wire wrap)				
154	Remove SMAS (wire wrap)				
155	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)				
156	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)				
157	**SIMPLE CROSS CONNECT AT THE NID**				
158	Customer contact to gain access				
159	Setup time / 1 work activity				

SERVICE ORDER PROCESS / NON-RECURRING TYPE MATRIX

1	2	15	16	17	18	19	20	21	22	23
ID No.	Process Flow / Activity	1 POTS / ISDN BRI Migration (TSR)	2 POTS / ISDN BRI Install (TSR)	3 POTS / ISDN BRI Migration (UNE Platform)	4 POTS / ISDN BRI Install (UNE Platform)	5 POTS / ISDN BRI Disconnect (TSR / UNE Platform)	6 POTS / ISDN BRI Migration (UNE Loop)	7 POTS / ISDN BRI Install (UNE Loop)	8 POTS / ISDN BRI Disconnect (UNE Loop)	9 Feature Changes
160	Rearrange cross wire at NID									
161	Perform continuity test (check dial tone and ANI)									
162	Tear down setup / 1 work activity									
163	**DS3 FACILITIES (Loop and Transport)**									
164	Install card for DCS									
165	Perform DSX3 cross connect									
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
168	Electronic cross connect on DCS									
169	Electronic disconnect on DCS									
170	Electronic cross connect on SONET MUX									
171	Electronic cross connect on SONET MUX									
172	Perform remote PRSB15 test									
173	Performance monitoring testing									
174	Retrieve and analyze performance monitoring data									
175	Intrusive test (ITS)									
176	CPU time for registers									
177	**DS1 INTEROFFICE TRANSPORT**									
178	Install card for DCS									
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
180	Install plug in for low speed DS1 (low speed STS1 to DS1)									
181	Electronic cross connect on DCS									
182	Electronic disconnect on DCS									
183	Electronic cross connect on low speed DS1 (low speed DS1)									
184	Electronic disconnect on low speed DS1 (low speed DS1)									
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
186	Performance monitoring testing									
187	Install CSU/DSU at STP									
188	Retrieve and analyze performance monitoring data									
189	Perform SS7 test									
190	Intrusive test (ITS)									
191	CPU time for registers									
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**									
193	Build global title translations - service level (input into SEAS / NET PILOT)									
194	**SS7 STP MESSAGE TRANSFER PART**									
195	Build MTP point code to link set translations									
196	Insert translations to perform diagnostics and place in available and in-service state									
197	Insert translations to place in an out-of-service and available state									
198	***Fall Out Steps***	X	X	X	X	X	X	X	X	X

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	24	25	26	27	28	29	30	31	32
ID No.	Process Flow / Activity	10 4 Wire Migration (UNE Loop)	11 4 Wire Install (UNE Loop)	12 4 Wire Disconnect (UNE Loop)	13 2 Wire Migration at the FDI	14 2 Wire Disconnect at the FDI	15 4 Wire Migration at the FDI	16 4 Wire Disconnect at the FDI	17 2 Wire Migration at the NID	18 Channelized DS1 Virtual Feeder to Terminal
160	*Translation Steps* at NID								X	
161	Perform continuity test (check dial tone and ANI)								X	
162	Tear down setup / 1 work activity								X	
163	**DS3 FACILITIES (Loop and Transport)**									
164	Install card for DCS									
165	Perform DSX3 cross connect									
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
168	Electronic cross connect on DCS									
169	Electronic disconnect on DCS									
170	Electronic cross connect on SONET MUX									
171	Electronic cross connect on SONET MUX									
172	Perform remote PRSB15 test									
173	Performance monitoring testing									
174	Retrieve and analyze performance monitoring data									
175	Intrusive test (ITS)									
176	CPU time for registers									
177	**DS1 INTEROFFICE TRANSPORT**									
178	Install card for DCS									
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
180	Install plug in for low speed DS1 (low speed STS1 to DS1)									
181	Electronic cross connect on DCS									
182	Electronic disconnect on DCS									
183	Electronic cross connect on low speed DS1 (low speed DS1)									
184	Electronic disconnect on low speed DS1 (low speed DS1)									
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
186	Performance monitoring testing									X
187	Install CSU/DSU at STP									
188	Retrieve and analyze performance monitoring data									X
189	Perform SS7 test									
190	Intrusive test (ITS)									X
191	CPU time for registers									X
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**									
193	Build global title translations - service level (input into SEAS / NET PILOT)									
194	**SS7 STP MESSAGE TRANSFER PART**									
195	Build MTP point code to link set translations									
196	Insert translations to perform diagnostics and place in available and in-service state									
197	Insert translations to place in an out-of-service and available state									
198	*Fall Out Steps*	X	X	X	X	X	X	X		X

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	33	34	35	36	37	38	39	40	41
ID No.	Process Flow / Activity	19 Channelized DS1 Virtual Feeder to RT Disconnect	20 DS1 Interoffice Transport Install	21 DS1 Interoffice Transport Disconnect	22 DS3 Interoffice Transport Install	23 DS3 Interoffice Transport Disconnect	24 2 Wire Loop different CO Migration	25 2 Wire Loop different CO Install	26 2 Wire Loop different CO Disconnect	27 4 Wire Loop different CO Migration
160	Pre-Order Steps at NID									
161	Perform continuity test (check dial tone and ANI)									
162	Tear down setup / 1 work activity									
163	**DS3 FACILITIES (Loop and Transport)**									
164	Install card for DCS				X					
165	Perform DSX3 cross connect									
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)				X					
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
168	Electronic cross connect on DCS				X					
169	Electronic disconnect on DCS					X				
170	Electronic cross connect on SONET MUX				X					
171	Electronic cross connect on SONET MUX									
172	Perform remote PRSB15 test				X					
173	Performance monitoring testing				X					
174	Retrieve and analyze performance monitoring data				X					
175	Intrusive test (ITS)				X					
176	CPU time for registers				X					
177	**DS1 INTEROFFICE TRANSPORT**									
178	Install card for DCS		X							
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)		X							
180	Install plug in for low speed DS1 (low speed STS1 to DS1)		X							
181	Electronic cross connect on DCS		X							
182	Electronic disconnect on DCS			X						
183	Electronic cross connect on low speed DS1 (low speed DS1)		X							
184	Electronic disconnect on low speed DS1 (low speed DS1)			X						
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU		X							
186	Performance monitoring testing		X							
187	Install CSU/DSU at STP									
188	Retrieve and analyze performance monitoring data		X							
189	Perform SS7 test									
190	Intrusive test (ITS)		X							
191	CPU time for registers		X							
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**									
193	Build global title translations - service level (input into SEAS / NET PILOT)									
194	**SS7 STP MESSAGE TRANSFER PART**									
195	Build MTP point code to link set translations									
196	Insert translations to perform diagnostics and place in available and in-service state									
197	Insert translations to place in an out-of-service and available state									
198	*Fall Out Steps*	X	X	X	X	X	X	X	X	X

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	42	43	44	45	48	49	50	51	52
ID No.	Process Flow / Activity	28 4 Wire Loop, different CO Install	29 4 Wire Loop, different CO Disconnect	30 DS1 Loop to Customer Premise Migration	31 DS1 Loop to Customer Premise Install	32 DS1 Loop to Customer Premise Disconnect	33 DS3 Loop to Customer Premise Migration	34 DS3 Loop to Customer Premise Install	35 DS3 Loop to Customer Premise Disconnect	36 Line Port (DS0 Analog, SLU) Install
160	*Pre Order Steps*									
161	Perform continuity test (check dial tone and ANI)									
162	Tear down setup / 1 work activity									
163	**DS3 FACILITIES (Loop and Transport)**									
164	Install card for DCS									
165	Perform DSX3 cross connect						X	X		
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)							X		
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)							X		
168	Electronic cross connect on DCS									
169	Electronic disconnect on DCS									
170	Electronic cross connect on SONET MUX							X		
171	Electronic cross connect on SONET MUX							X		
172	Perform remote PRSB15 test						X	X		
173	Performance monitoring testing						X	X		
174	Retrieve and analyze performance monitoring data						X	X		
175	Intrusive test (ITS)						X	X		
176	CPU time for registers						X	X		
177	**DS1 INTEROFFICE TRANSPORT**									
178	Install card for DCS									
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
180	Install plug in for low speed DS1 (low speed STS1 to DS1)									
181	Electronic cross connect on DCS									
182	Electronic disconnect on DCS									
183	Electronic cross connect on low speed DS1 (low speed DS1)									
184	Electronic disconnect on low speed DS1 (low speed DS1)									
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU									
186	Performance monitoring testing									
187	Install CSU/DSU at STP									
188	Retrieve and analyze performance monitoring data									
189	Perform SS7 test									
190	Intrusive test (ITS)									
191	CPU time for registers									
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**									
193	Build global title translations - service level (input into SEAS / NET PILOT)									
194	**SS7 STP MESSAGE TRANSFER PART**									
195	Build MTP point code to link set translations									
196	Insert translations to perform diagnostics and place in available and in-service state									
197	Insert translations to place in an out-of-service and available state									
198	***Fall Out Steps***	X	X	X	X	X	X	X	X	X

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	53	54	55	56	57	58	59	60	61
ID No.	Process Flow / Activity	37 Line Port (DS0, Analog, ISLU) Disconnect	38 Channelized DS1 line port (TR-303-IDT) Install	39 Channelized DS1 line port (TR-303-IDT) Disconnect	40 Fiber Cross Connects Install (LGX)	41 Fiber Disconnect (LGX)	42 SS7 Links (DS0) Install	43 SS7 Links (DS0) Disconnect	44 SS7 Links (DS1) Install	45 SS7 Links (DS1) Disconnect
160	*Pre-Order Steps* Rearrange [illegible] at NID									
161	Perform continuity test (check dial tone and ANI)									
162	Tear down setup / 1 work activity									
163	**DS3 FACILITIES (Loop and Transport)**									
164	Install card for DCS									
165	Perform DSX3 cross connect									
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)									
168	Electronic cross connect on DCS									
169	Electronic disconnect on DCS									
170	Electronic cross connect on SONET MUX									
171	Electronic cross connect on SONET MUX									
172	Perform remote PRSB15 test									
173	Performance monitoring testing									
174	Retrieve and analyze performance monitoring data									
175	Intrusive test (ITS)									
176	CPU time for registers									
177	**DS1 INTEROFFICE TRANSPORT**									
178	Install card for DCS								X	
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)								X	
180	Install plug in for low speed DS1 (low speed STS1 to DS1)								X	
181	Electronic cross connect on DCS								X	
182	Electronic disconnect on DCS									X
183	Electronic cross connect on low speed DS1 (low speed DS1)								X	
184	Electronic disconnect on low speed DS1 (low speed DS1)									X
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU								X	
186	Performance monitoring testing								X	
187	Install CSU/DSU at STP								X	
188	Retrieve and analyze performance monitoring data								X	
189	Perform SS7 test								X	
190	Intrusive test (ITS)								X	
191	CPU time for registers								X	X
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**									
193	Build global title translations - service level (input into SEAS / NET PILOT)									
194	**SS7 STP MESSAGE TRANSFER PART**									
195	Build MTP point code to link set translations									
196	Insert translations to perform diagnostics and place in available and in-service state									
197	Insert translations to place in an out-of-service and available state									
198	***Fall Out Steps***	X	X	X			X	X	X	X

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	62	63	64	65
ID No.	Process Flow / Activity	46 SS7 STP global title translations 'A Link' only Install	47 SS7 STP global title translations 'A Link' only Disconnect	48 SS7 STP message transfer part 'A Link' only (port) Install	49 SS7 STP message transfer part 'A Link' only (port) Disconnect
160	***Pre-Order Steps*** Test at NID				
161	Perform continuity test (check dial tone and ANI)				
162	Tear down setup / 1 work activity				
163	**DS3 FACILITIES (Loop and Transport)**				
164	Install card for DCS				
165	Perform DSX3 cross connect				
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)				
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)				
168	Electronic cross connect on DCS				
169	Electronic disconnect on DCS				
170	Electronic cross connect on SONET MUX				
171	Electronic cross connect on SONET MUX				
172	Perform remote PRSB15 test				
173	Performance monitoring testing				
174	Retrieve and analyze performance monitoring data				
175	Intrusive test (ITS)				
176	CPU time for registers				
177	**DS1 INTEROFFICE TRANSPORT**				
178	Install card for DCS				
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)				
180	Install plug in for low speed DS1 (low speed STS1 to DS1)				
181	Electronic cross connect on DCS				
182	Electronic disconnect on DCS				
183	Electronic cross connect on low speed DS1 (low speed DS1)				
184	Electronic disconnect on low speed DS1 (low speed DS1)				
185	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU				
186	Performance monitoring testing				
187	Install CSU/DSU at STP				
188	Retrieve and analyze performance monitoring data				
189	Perform SS7 test				
190	Intrusive test (ITS)				
191	CPU time for registers				
192	**SS7 STP GLOBAL TITLE TRANSLATIONS**				
193	Build global title translations - service level (input into SEAS / NET PILOT)	X	X		
194	**SS7 STP MESSAGE TRANSFER PART**				
195	Build MTP point code to link set translations			X	X
196	Insert translations to perform diagnostics and place in available and in-service state			X	
197	Insert translations to place in an out-of-service and available state				X
198	***Fall Out Steps***	X	X	X	X

SERVICE ORDER PROCESS / NON-RECURRING TYPE MATRIX

1	2	15	16	17	18	19	20	21	22	23
ID No.	Process Flow / Activity	1 POTS / ISDN BRI Migration (TSR)	2 POTS / ISDN BRI Install (TSR)	3 POTS / ISDN BRI Migration (UNE Platform)	4 POTS / ISDN BRI Install (UNE Platform)	5 POTS / ISDN BRI Disconnect (TSR / UNE Platform)	6 POTS / ISDN BRI Migration (UNE Loop)	7 POTS / ISDN BRI Install (UNE Loop)	8 POTS / ISDN BRI Disconnect (UNE Loop)	9 Feature Change
199	Fall Out: RMAs forwarded to PAWS for reconciliation	X	X	X	X	X				X
200	Fall Out: Pull and analyze order: RCMAC	X	X	X	X	X				X
201	Fall Out: Resolve fallout: RCMAC	X	X	X	X	X				X
202	Fall Out: RMAs forwarded to PAWS for reconciliation						X	X	X	
203	Fall Out: Pull and analyze order: LAC						X	X	X	
204	Fall Out: Resolve fallout: LAC						X	X	X	
205	Fall Out: Pull and analyze order: CPC									
206	Fall Out: Resolve fallout: CPC									
207	Fall Out: Pull and analyze order: SCC									
208	Fall Out: Resolve fallout: SCC									
209	***Close Order Steps***						X	X	X	
210	Close order: FCC:Copper%						X	X	X	
211	Close order: FCC:Copper%*%_Non_Dedicated		X		X					
212	Close order: FMAC									
213	Close order: SS I&M/OSP									
214	Close order: NTEC: Copper%									
215	Close order: NTEC									
216	Close order: SSC									
217	***Close Order Provisioning Steps***	X	X	X	X	X	X	X	X	X
218	SOAC updates SOP	X	X	X	X	X	X	X	X	X
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	X	X	X	X	X	X	X	X	X
220	SOAC updates WFA, NSDB, and CABS									
221	SOP completes LSR	X	X	X	X	X	X	X	X	X
222	ILEC gateway notifies CLEC of completed order	X	X	X	X	X	X	X	X	X
223	ILEC billing system issues final bill to migrating customer	X		X			X			
224	***End of Process Steps***	X	X	X	X	X	X	X	X	X
225	Last Line									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	24	25	26	27	28	29	30	31	32
ID No.	Process Flow / Activity	10 4 Wire Migration (UNE Loop)	11 4 Wire Install (UNE Loop)	12 4 Wire Disconnect (UNE Loop)	13 2 Wire Migration at the FDI	14 2 Wire Disconnect at the FDI	15 4 Wire Migration at the FDI	16 4 Wire Disconnect at the FDI	17 2 Wire Migration at the NID	18 Channelized DS1 Virtual Feeder to Retail
199	***Pre Order Steps*** RMAs forwarded to PAWS for reconciliation									
200	Fall Out: Pull and analyze order: RCMAC									
201	Fall Out: Resolve fallout: RCMAC									
202	Fall Out: RMAs forwarded to PAWS for reconciliation				X	X				
203	Fall Out: Pull and analyze order: LAC				X	X				
204	Fall Out: Resolve fallout: LAC				X	X				
205	Fall Out: Pull and analyze order: CPC	X	X	X			X	X		X
206	Fall Out: Resolve fallout: CPC	X	X	X			X	X		X
207	Fall Out: Pull and analyze order: SCC									
208	Fall Out: Resolve fallout: SCC									
209	***Close Order Steps***									X
210	Close order: FCC:Copper%									
211	Close order: FCC:Copper%*%_Non_Dedicated									
212	Close order: FMAC									X
213	Close order: SS I&M/OSP				X	X	X	X	X	
214	Close order: NTEC: Copper%	X	X	X						
215	Close order: NTEC						X			
216	Close order: SSC	X	X	X			X	X		
217	***Close Order Provisioning Steps***	X	X	X	X	X	X	X	X	X
218	SOAC updates SOP	X	X	X	X	X	X	X	X	X
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	X	X	X	X	X	X	X	X	X
220	SOAC updates WFA, NSDB, and CABS									
221	SOP completes LSR	X	X	X	X	X	X	X	X	X
222	ILEC gateway notifies CLEC of completed order	X	X	X	X	X	X	X	X	X
223	ILEC billing system issues final bill to migrating customer	X			X		X		X	
224	***End of Process Steps***	X	X	X	X	X	X	X	X	X
225	**Last Line**									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	33	34	35	36	37	38	39	40	41
ID No.	Process Flow / Activity	19 Channelized DS1 Virtual Feeder to RT Disconnect	20 DS1 Interoffice Transport Install	21 DS1 Interoffice Transport Disconnect	22 DS3 Interoffice Transport Install	23 DS3 Interoffice Transport Disconnect	24 2 Wire Loop, different CO Migration	25 2 Wire Loop, different CO Install	26 2 Wire Loop, different CO Disconnect	27 4 Wire Loop, different CO Migration
199	***Pre-Order Steps*** RCMACs forwarded to PAWS for reconciliation									
200	Fall Out: Pull and analyze order: RCMAC									
201	Fall Out: Resolve fallout: RCMAC									
202	Fall Out: RMAs forwarded to PAWS for reconciliation									
203	Fall Out: Pull and analyze order: LAC									
204	Fall Out: Resolve fallout: LAC									
205	Fall Out: Pull and analyze order: CPC	X	X	X	X	X	X	X	X	X
206	Fall Out: Resolve fallout: CPC	X	X	X	X	X	X	X	X	X
207	Fall Out: Pull and analyze order: SCC									
208	Fall Out: Resolve fallout: SCC									
209	***Close Order Steps***		X		X				X	
210	Close order: FCC:Copper%									
211	Close order: FCC:Copper%*%_Non_Dedicated									
212	Close order: FMAC	X	X		X					
213	Close order: SS I&M/OSP									
214	Close order: NTEC: Copper%						X	X	X	X
215	Close order: NTEC									
216	Close order: SSC						X	X	X	X
217	***Close Order Provisioning Steps***	X	X	X	X	X	X	X	X	X
218	SOAC updates SOP	X	X	X	X	X	X	X	X	X
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	X					X	X	X	X
220	SOAC updates WFA, NSDB, and CABS		X	X	X	X				
221	SOP completes LSR	X	X	X	X	X	X	X	X	X
222	ILEC gateway notifies CLEC of completed order	X	X	X	X	X	X	X	X	X
223	ILEC billing system issues final bill to migrating customer						X			X
224	***End of Process Steps***	X	X	X	X	X	X	X	X	X
225	**Last Line**									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	42	43	44	45	48	49	50	51	52
ID No.	Process Flow / Activity	28 4 Wire Loop, different CO Install	29 4 Wire Loop, different CO Disconnect	30 DS1 Loop to Customer Premise Migration	31 DS1 Loop to Customer Premise Install	32 DS1 Loop to Customer Premise Disconnect	33 DS3 Loop to Customer Premise Migration	34 DS3 Loop to Customer Premise Install	35 DS3 Loop to Customer Premise Disconnect	36 Line Port (DS0) Analog (SLU) Install
199	*Pre Order Steps* / Fall Out: [illegible] forwarded to PAWS for reconciliation									X
200	Fall Out: Pull and analyze order: RCMAC									X
201	Fall Out: Resolve fallout: RCMAC									X
202	Fall Out: RMAs forwarded to PAWS for reconciliation									
203	Fall Out: Pull and analyze order: LAC									
204	Fall Out: Resolve fallout: LAC									
205	Fall Out: Pull and analyze order: CPC	X	X	X	X	X	X	X	X	
206	Fall Out: Resolve fallout: CPC	X	X	X	X	X	X	X	X	
207	Fall Out: Pull and analyze order: SCC									
208	Fall Out: Resolve fallout: SCC									
209	*Close Order Steps*	X	X	X	X	X	X	X	X	X
210	Close order: FCC:Copper%									X
211	Close order: FCC:Copper%*%_Non_Dedicated									
212	Close order: FMAC			X	X	X	X	X	X	
213	Close order: SS I&M/OSP									
214	Close order: NTEC: Copper%	X	X							
215	Close order: NTEC									
216	Close order: SSC	X	X	X	X	X	X	X	X	
217	*Close Order Provisioning Steps*	X	X	X	X	X	X	X	X	X
218	SOAC updates SOP	X	X	X	X	X	X	X	X	X
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	X	X	X	X	X	X	X	X	X
220	SOAC updates WFA, NSDB, and CABS									
221	SOP completes LSR	X	X	X	X	X	X	X	X	X
222	ILEC gateway notifies CLEC of completed order	X	X	X	X	X	X	X	X	X
223	ILEC billing system issues final bill to migrating customer			X			X			
224	*End of Process Steps*	X	X	X	X	X	X	X	X	X
225	Last Line									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	53	54	55	56	57	58	59	60	61
ID No.	Process Flow / Activity	37 Line Port (DS0, Analog, ISLU) Disconnect	38 Channelized DS1 line port (TR-303-IDT) Install	39 Channelized DS1 line port (TR-303-IDT) Disconnect	40 Fiber Cross Connects Install (LGX)	41 Fiber Disconnect (LGX)	42 SS7 Link3 (DS0) Install	43 SS7 Link3 (DS0) Disconnect	44 SS7 Link3 (DS1) Install	45 SS7 Link3 (DS1) Disconnect
199	*Pre Order Steps* warded to PAWS for reconciliation	X								
200	Fall Out: Pull and analyze order: RCMAC	X								
201	Fall Out: Resolve fallout: RCMAC	X								
202	Fall Out: RMAs forwarded to PAWS for reconciliation									
203	Fall Out: Pull and analyze order: LAC									
204	Fall Out: Resolve fallout: LAC									
205	Fall Out: Pull and analyze order: CPC		X	X			X	X	X	X
206	Fall Out: Resolve fallout: CPC		X	X			X	X	X	X
207	Fall Out: Pull and analyze order: SCC									
208	Fall Out: Resolve fallout: SCC									
209	***Close Order Steps***	X	X	X	X	X	X	X	X	X
210	Close order: FCC:Copper%	X								
211	Close order: FCC:Copper%*%_Non_Dedicated									
212	Close order: FMAC		X	X	X	X			X	X
213	Close order: SS I&M/OSP									
214	Close order: NTEC: Copper%						X	X		
215	Close order: NTEC									
216	Close order: SSC						X	X		
217	***Close Order Provisioning Steps***	X	X	X	X	X	X	X	X	X
218	SOAC updates SOP	X	X	X	X	X	X	X	X	X
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	X	X	X	X	X	X	X		
220	SOAC updates WFA, NSDB, and CABS								X	X
221	SOP completes LSR	X	X	X	X	X	X	X	X	X
222	ILEC gateway notifies CLEC of completed order	X	X	X	X	X	X	X	X	X
223	ILEC billing system issues final bill to migrating customer									
224	***End of Process Steps***	X	X	X	X	X	X	X	X	X
225	**Last Line**									

SERVICE ORDER PROCESS / NON-RECURRING TYPE M

1	2	62	63	64	65
ID No.	Process Flow / Activity	46 SS7 STP global title translations 'A Link' only Install	47 SS7 STP global title translations 'A Link' only Disconnect	48 SS7 STP message transfer part 'A Link' only (port) Install	49 SS7 STP message transfer part 'A Link' only (port) Disconnect
199	***Pre Order Steps***				
200	Fall Out: Pull and analyze order: RCMAC				
201	Fall Out: Resolve fallout: RCMAC				
202	Fall Out: RMAs forwarded to PAWS for reconciliation				
203	Fall Out: Pull and analyze order: LAC				
204	Fall Out: Resolve fallout: LAC				
205	Fall Out: Pull and analyze order: CPC				
206	Fall Out: Resolve fallout: CPC				
207	Fall Out: Pull and analyze order: SCC	X	X	X	X
208	Fall Out: Resolve fallout: SCC	X	X	X	X
209	***Close Order Steps***	X	X	X	X
210	Close order: FCC:Copper%				
211	Close order: FCC:Copper%*%_Non_Dedicated				
212	Close order: FMAC				
213	Close order: SS I&M/OSP				
214	Close order: NTEC: Copper%				
215	Close order: NTEC				
216	Close order: SSC	X	X	X	X
217	***Close Order Provisioning Steps***				
218	SOAC updates SOP				
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.				
220	SOAC updates WFA, NSDB, and CABS				
221	SOP completes LSR				
222	ILEC gateway notifies CLEC of completed order				
223	ILEC billing system issues final bill to migrating customer				
224	***End of Process Steps***	X	X	X	X
225	**Last Line**				

NON-RECURRING COST MODEL

Version 2.2

USER GUIDE

1. General Introduction

The ***Non-Recurring Cost Model*** sponsored by AT&T and MCI is a spreadsheet based costing tool that calculates the forward-looking cost of customer connection, disconnection, and change of service. The model also calculates the costs of additional activities related to interconnection, unbundling, and wholesale service. This User Guide is provided to help the user step through the *NRC Model*. Additional detail is provided in the Model Description document.

To enhance the cost model's functionality and to facilitate ease-of-use, the model utilizes advanced features of **Microsoft Excel 7.0**; these features include *visual basic for applications* (VBA) macros and dialog boxes. The macros are routines that serve to automate repetitive processes and to simplify operations and calculations. The dialog boxes allow users to quickly and accurately choose NRC scenarios and to alter the numerous user-adjustable variables via drop-down boxes, check boxes, buttons, and spinners.

The model is composed of 19 unique sheets, including: nine standard Excel worksheets, five VBA module sheets, and five dialog sheets. The following sheets are visible at model start-up:

- *Control* - buttons to run and navigate the model and to present summary results
- *Processes & Calcs* - process steps, calculations, and inputs for the intersection of NRC type and required process
- *Inputs* - presents NRC elements and inputs from dialog box interfaces
- *Batch Output* - detailed outputs and costs for each NRC element
- *Input Record* - detailed record of the selected inputs compared to the default inputs
- *Glossary* - presents telephony acronyms, technical terminology, and descriptions

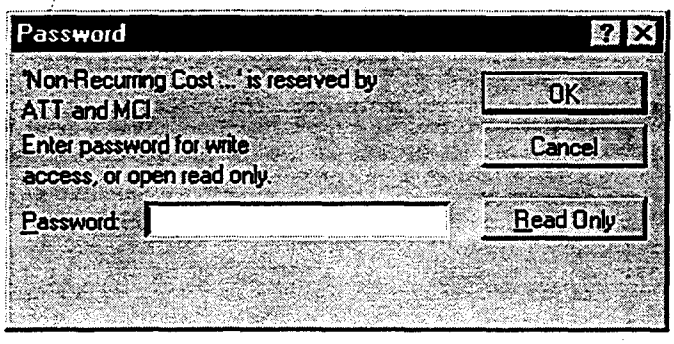
The following sheets are hidden at model start-up:

- *dlg NRC model* - first dialog box
- *dlg Customize Batch* - second dialog box
- *dlg Labor Rates* - third dialog box
- *dlg Other NRC* - fourth dialog box
- *dlg Instruction* - NRC Model user instructions
- Print Macro Button - sheet containing the button used for printing the Batch Output on a newly created workbook
- Batch PO Staging - a staging sheet used for printing Batch Output
- Batch Summary Tempy Sheet - a staging sheet used for printing Batch Output
- *Source Code* - visual basic for applications code
- *Copy Input Value Code* - visual basic for applications code
- *Save Option Code* - visual basic for applications code
- *Print File Batch Run Code* - visual basic for applications code
- *Other Inputs Code* - visual basic for applications code

The hidden sheets can only be seen directly by going to the toolbar and using the **Format - Sheet - Unhide** command. These sheets are hidden because model users do not need to access these sheets to run the model.

2. Opening the Model

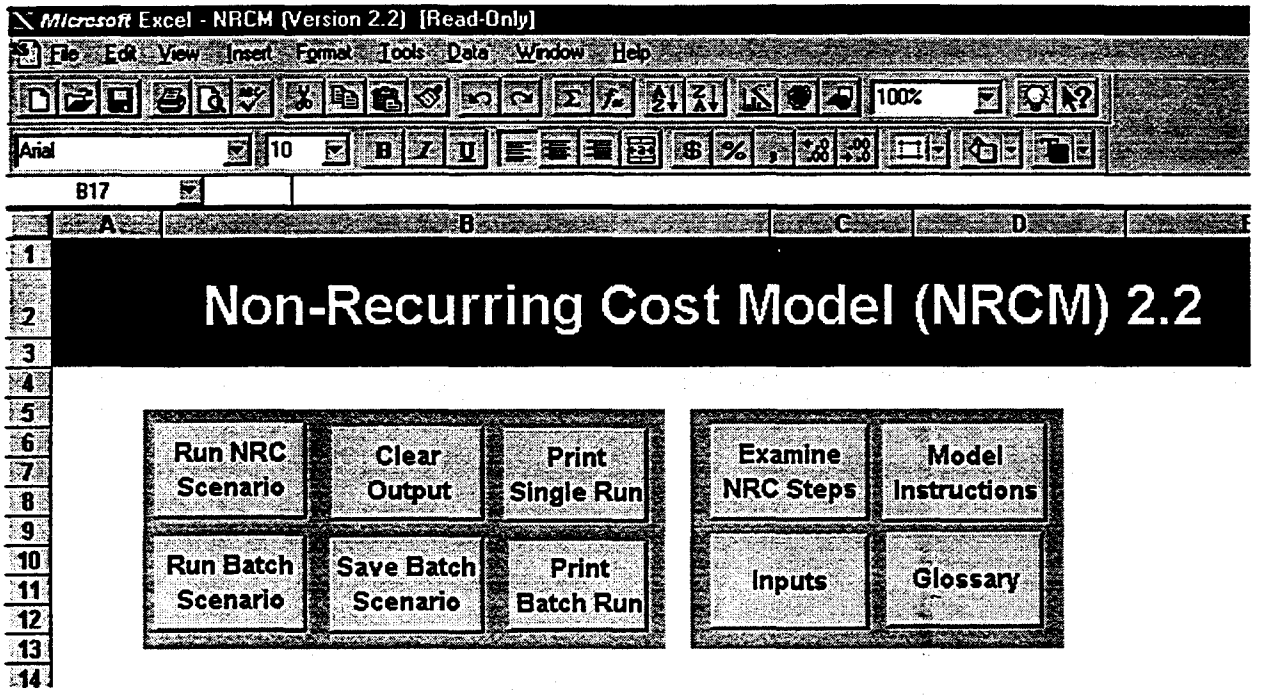
When the user opens the model they will see the following Password protection message.



The model user must open the model by clicking the 'Read Only' option. The user will be able to do everything they need to do with the model with the 'Read Only' option. This protection ensures that the user will not inadvertently change the coding in the model. Once opened as 'Read Only' the file may be saved with a *different* file name.

3. "Control" Sheet

When the user opens the ***Non-Recurring Cost Model*** they are presented with a "*Control*" sheet.



The "*Control*" sheet presents eight buttons to run and navigate the ***Non-Recurring Cost Model.***

On the left side of the sheet there are six buttons for running the model, printing output, clearing output, and saving data. The following is a description of the functionality provided by each button:

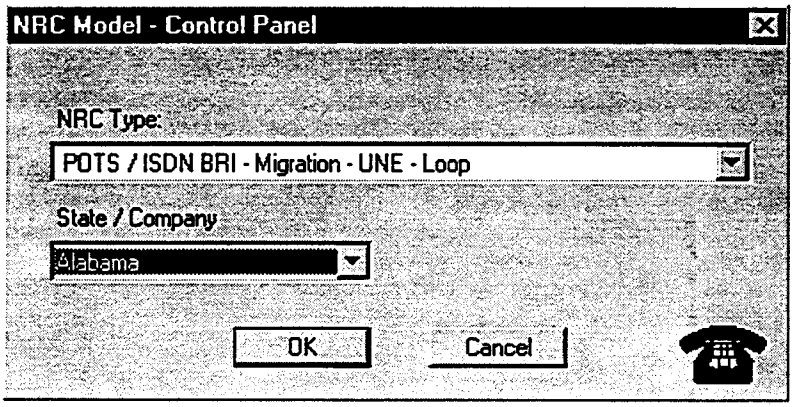
- *Run NRC Scenario* - used to calculate the cost of a single NRC element
- *Run Batch Scenario* - used to calculate the costs of all the NRC elements
- *Clear Output* - used to clear the output from the latest 'NRC Scenario' or 'Batch Scenario'
- *Save Batch Scenario* - used to save the summary data, the inputs, and the output detail for a 'Batch Scenario' to a separate Excel workbook
- *Print Single Run* - used to print the summary data and the inputs from a 'NRC Scenario'
- *Print Batch Run* - used to print the summary data, the inputs, and the output detail for a 'Batch Scenario'

On the right side of the "*Control*" sheet there are four additional buttons. The buttons provide the following additional functionality:

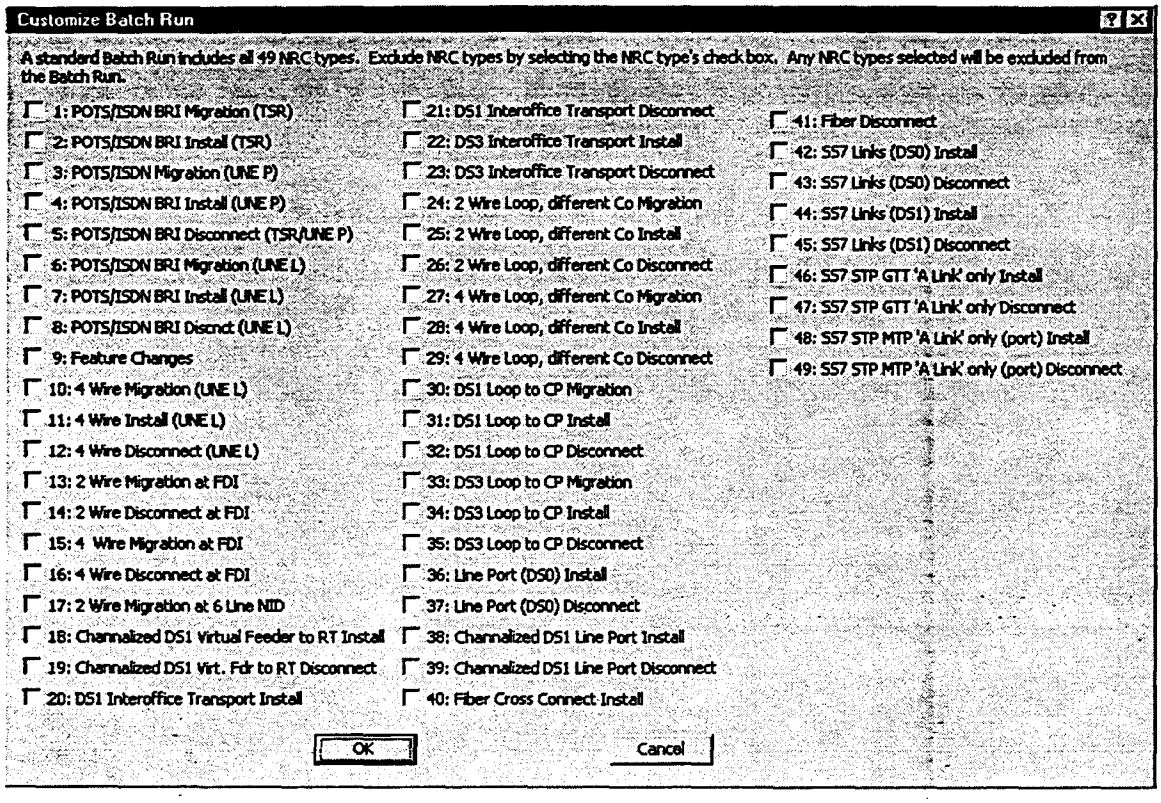
- *Examine NRC Steps* - goes to the "*Processes & Calcs*" sheet where the specific steps costed for a particular NRC element or the complete table of processing steps may be viewed
- *Model Instructions* - used to call up a simple help tool
- *Inputs* - used to quickly go to the *"Input"* sheet
- *Glossary* - used to examine a list of telephony terms and acronyms by going to the "*Glossary*" worksheet

4. Dialog Boxes

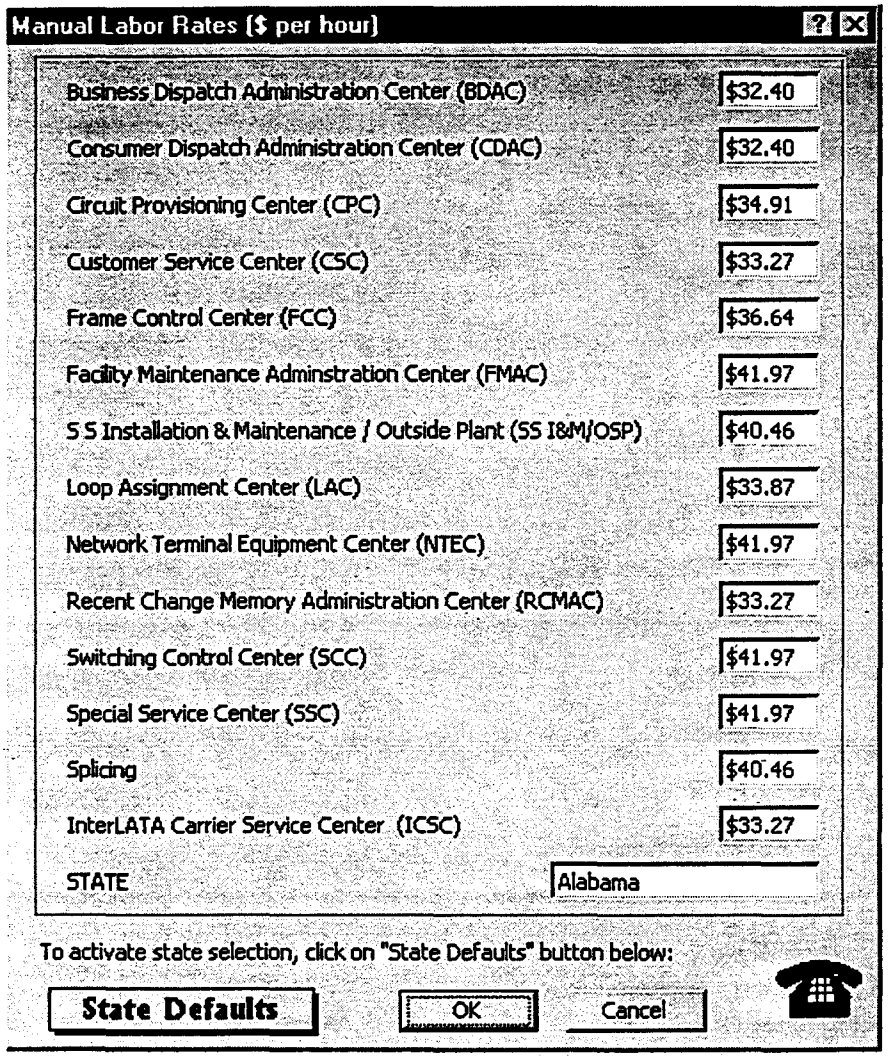
The first dialog box, titled "*NRC Model - Control Panel*", allows the user to choose the type of non-recurring charge and the state. For Batch Runs, the NRC Type drop down box is not used because all the NRC Elements are included in a Batch Run.



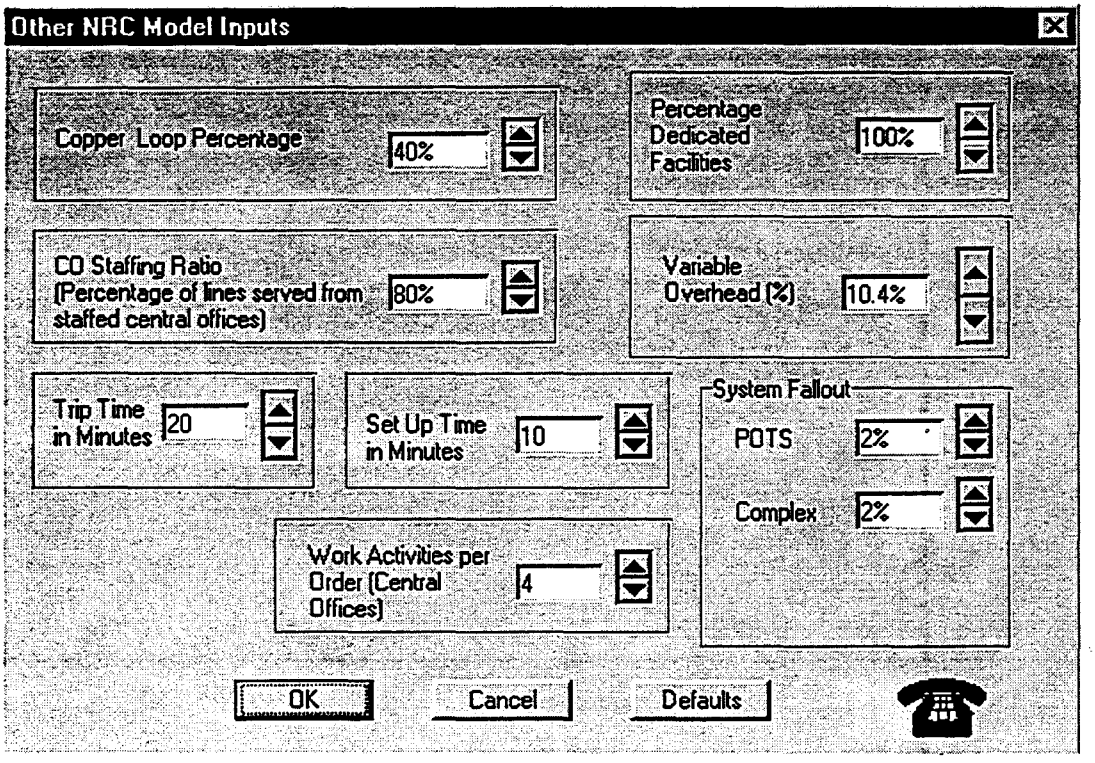
The second dialog box, titled "*Customize Batch Run*" allows the user to **exclude** certain elements from the batch run. The user can exclude elements by checking the boxes that correspond to the element. If the user does not wish to exclude any elements, they should ensure that none of the check boxes are selected and then click the OK button to continue.



The third dialog box, titled "*Manual Labor Rates ($ per hour)*" allows the user to set individual labor rates for 14 technician types. The lower edit box on this dialog box shows the state whose labor rates appear in the other edit boxes. When initially running the model for a state, the user must select the **State Defaults** button. The model will populate the edit boxes with the labor rates for the state. The user must then choose the OK button to continue to the next dialog sheet. If the lower edit box displays the correct name of the state chosen for a model run, the user can immediately click the OK button to continue to the next dialog box.



The fourth and final dialog box, titled "*Other NRC Model Inputs*", allows the user to adjust nine categories of inputs; these categories include: the copper loop percentage, CO staffing ratio, trip time, setup times, work activities per order, variable overhead percentage, percentage dedicated facilities, and system fallout percentages for POTS and complex actions. The user can select the model's defaults by selecting the Defaults button. When the user is satisfied with the inputs click the OK button to continue.



5. Running the Model

To run the *Non-Recurring Cost Model* the user must first choose "*Run NRC Scenario*" or "*Run Batch Scenario*" from the "*Control Sheet*". After choosing one of these options, the user will be presented, in succession, with the four dialog boxes noted above. The user has the option to run the model with the default inputs or to adjust them.

When the user chooses *"Run NRC Scenario"*, the user will be presented with a summary output on the "*Control*" sheet; showing NRC element and cost. If the user wishes to see further detail they should use the "*Examine NRC Steps*" button. This button will take the user to the "*Processes & Calcs*" sheet. This sheet will be "filtered" for those activities required for the chosen NRC element. The user can go to the "*Inputs Record*" sheet to examine which of the inputs were used to create the current outputs.

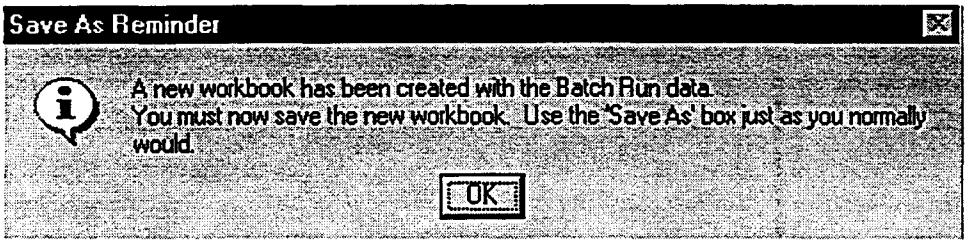
When the user chooses the "*Run Batch Scenario*" the model will produce a comprehensive summary list of NRC types and costs on the "*Control Sheet*". To examine all the required steps for each NRC element, the user should go to the "*Batch Output*" sheet. This sheet records all the steps required for each of the NRC types. Finally, the model also produces a list of the inputs used to create the "Batch Output" in the "Input Record".

Important Note

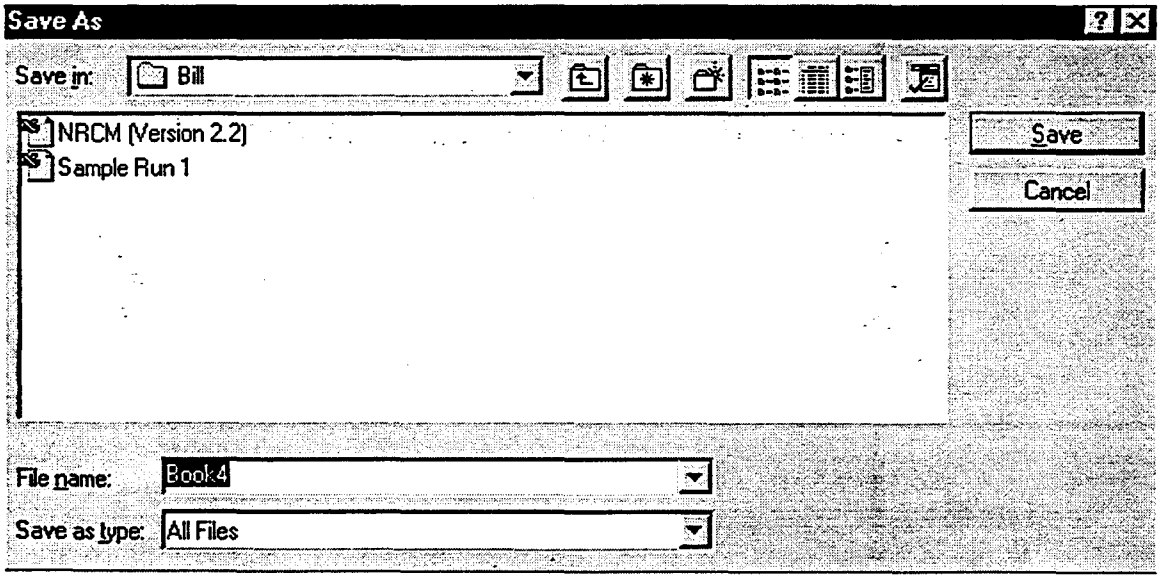
If the user runs another Scenario or Batch Run, the model will overwrite the contents of the "Control", "Batch Output", and "Input Record" sheets. If the user requires a permanent record of a Batch Run, they should use the save option outlined in section 6, page 11 of this users guide.

6. "Saving Batch Scenario" Data

By selecting the "Save Batch Scenario" button the model will save all the data relevant to a Batch Run in a separate Excel workbook. The workbook will include 4 sheets entitled: "*Print Macro Button*", "*Summary*", "*Batch Output*", and "*Input Record*". These sheets will contain the same data that resides in the sheets "*Control*", "*Batch Output*", and "*Input Record*" respectively. The model will prompt the user to save the new workbook.

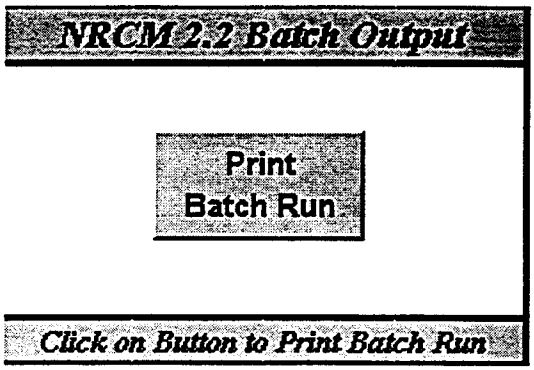


In addition, the user will be prompted to name and choose the directory for the newly created workbook with the following message screen:



The user should use this screen just as they normally would. When the user has named the workbook, the model will remind the user that the data has been saved in a new workbook, the new workbook is still open and return the user to the "Control" screen.

Note: When the user chooses to return to the new workbook, the following "Print Batch Run" button will appear. Once the "Print Batch Run" button has been activated, the "Batch Output" sheet will print in its entirety.



7. Printing A "Batch Scenario"

The user can print all the data relevant to a "Batch Scenario" by clicking the "Print Batch Scenario" button on the "Control" sheet. This button invokes a print MACRO that will send three print jobs to the user's default printer. The list below details the three print jobs:

- 1st Print Job
  ⇒ Content - Summary of NRC Elements and costs from the "Control" sheet
  ⇒ Page length - 2 pages

- 2nd Print Job
  ⇒ Content - Summary of Inputs from the "Input Record" Sheet
  ⇒ Page length - 1 page

- 3rd Print Job
  ⇒ Content - "Batch Output" sheet in its entirety
  ⇒ Pages - 75 pages.

The print MACRO is an excellent time saver. However, the user must realize that the total pages sent to your default printer upon execution of the MACRO is 78 pages. (This may be slightly more or less depending on the printer used).

8. Examining Model Mechanics and Algorithms

The user may wish to examine the detail behind the costs for each NRC element. The user can go to the "*Processes and Calcs*" sheet to see the specific electronic and or manual steps that the model used to generate element costs. The example below shows how the user could view only those activities that take place for *POTS / ISDN - Migration - TSR*, the model uses Excel's **Data - Filter - Autofilter** function. By using this function, the "*Processes and Calcs*" sheet will only show activities in which the NRC element and activity step intersect, this intersection is marked by an "**X**". The user should note that NRC scenarios are placed in columns and the process steps are in rows.

NRC #	Alabama - NRC Elements	Total Cost		Total Cost	
3	POTS / ISDN BRI Migration (UNE Platform)	$ 0.21	<-- *with overhead*	$ 0.19	<-- *without overhead*

SERVICE ORDER PROCESS / NON-RECURRING TYPE MATRIX

1	2	3	4	5	6	7	8
					A	B	C
ID No.	Process Flow / Activity	Step	System or Action	Work Center	Probability (%)	Time (minutes)	Rate ($/hour)
1	***Pre Order Steps***						
2	CLEC customer contact	Pre-Order	CLEC Customer Service Representative		NA	-	
3	CLEC requests customer address data, CSR, and appointment from ILEC	Pre-Order	CLEC gateway		NA	-	
4	ILEC gateway requests address data from Administrative Information System and CSR	Pre-Order	Premis, ALOC, BOSS, CRIS		100.0%	-	R
6	***Ordering Steps***						
7	CLEC customer service representative inputs LSR information into LOS	Order	ACTIVIEW		NA		
8	ILEC gateway receives, validates and logs LSR, returns FOC, and passes LSR to SOG	Order	ILEC gateway, STAREP, DOE		100.0%	-	R
10	ILEC SOG retrieves CSR data, formats and passes to SOP	Order	BOSS, SOP		100.0%	-	R
11	***Provisioning Processing Steps***						
13	SOP sends request to SOAC	Provisioning	SOP		100.0%	-	R
14	SOAC analyzes order, generates assignment requests for OSP, COE, IOF, etc.	Provisioning	SOAC		100.0%	-	R
20	SOAC receives COE, OSP, IOF, etc.	Provisioning	SOAC		100.0%	-	R
27	SOAC delivers recent change translation information	Provisioning	MARCH (ASAP for ISDN BRI)		100.0%	-	R
29	MARCH updates LDS.	Provisioning	MARCH (ASAP for ISDN BRI)		100.0%	-	R
198	***Fall Out Steps***						
199	Fall Out: RMAs forwarded to PAWS for reconciliation	Provisioning	CPU Time		2.0%		R
200	Fall Out: Poll and analyze order: RCMAC	Provisioning	ILEC manual activity	RCMAC	2.0%	2.50	$ 33.27
201	Fall Out: Resolve fallout: RCMAC	Provisioning	ILEC manual activity	RCMAC	2.0%	15.00	$ 33.27
217	***Close Order Provisioning Steps***						
218	SOAC updates SOP	Provisioning	SOAC		100.0%	-	R
219	SOAC updates WFA, NSDB, LMOS, BOSS, CRIS, etc.	Provisioning	SOAC		100.0%	-	R
221	SOP completes LSR	Provisioning	SOP		100.0%	-	R
222	ILEC gateway notifies CLEC of completed order	Provisioning	ILEC gateway		NA		
223	ILEC billing system issues final bill to migrating customer	Provisioning	ILEC gateway		NA		
224	***End of Process Steps***						

Telephony Acronyms & Technical Terminology

OSS Name	Acronym Definition	Function	Dependencies	Vendor
AMA/TPS	Automated Message Accounting/Teleprocessing System (i.e. Billdats)	Billing Data Collection		Lucent
CABS (IABS)	Carrier Access Billing System	IXC Billing	AMA Billdats	BCR
CAROT	Centralized Automated Remote Office Test	Trunk Testing		Lucent
CCRS	Customer Control Reconfiguration System	Customer/End User Recent Change for Centrex	MARCH	BCR/RBOC
CCSN	Customer Control and Service Negotiation	Customer Contact, Call Center (Bus. Off.)		LEC
CLEC	competitive local exchange carrier			
COER	Central Office Engineering Reports	Trunk Forecasting	EADAS	Lucent
CONNECTVU/ATP	Automated Trunk Provisioning (ATP)	Recent Change Trunk; Complex & Centrex Translations	TIRKS	Lucent
COSMOS/SWITCH	Computer System for Mainframe Operations	Line Equipment Number, Tie Pair, Office Equipment, etc. Assignment and Inventory	FACS	BCR
CRIS	Customer Record Information System	LEC End User Billing System	AMA Billdats	BCR/RBOC
CSR	customer service representative			
DCS	Digital Cross-Connect System	Specialized high-speed data channel switch		
DSX	Digital Signal Cross Connect			
EADAS	Engineering Acquisition Data and Analysis System	Traffic Data Collection		Lucent
EXACT		ASR Gateway		BCR
FAS	Field Access System	Field Testing, Time Reporting, Work Completion, Load and Work Package, etc.	WFA/C, LMOS, and other OSs	Lucent
FEPS	Facility Engineering Planning System	Facility Planning	TIRKS	BCR
FLEXCOM/LINC	Long Term Integrated Network Controller	End User Customer Control for DSO, DS1, DS3, via DCS	OPS/INE and TIRKS	BCR
IDLC	Integrated Digital Loop Carriers			
IDT	Integrate Digital Terminal			
ILEC	incumbent local exchange carrier			
INPLANS	Integrated Network Planning System	Planning and Design for Trunk Facilities	COER and EADAS	BCR
ISDN BRI	Integrated Services Digital Network - Basic Rate Interface			
ITS	Integrated Test System	Testing Operation System (TOS) for Special Services	SARTS, HLI, and other TSC/RTUs	BCR
LEIS/LEIM	Loop Equipment Inventory System/Loop Inventory Equipment Module	Loop Inventory/Makeup	LFACS	BCR
LFACS	Loop Facility Assignment Control System	Cable & Pair, Binding Post, etc. Inventory and Assignment	SOAC, COSMOS and LEIS/LEIM	BCR
LMOS	Loop Maintenance Operations System	POTS Work Management, Work Completion, Dispatching, Jeopardies, Time Reporting, etc.	LFACS, COSMOS, MLT, etc.	Lucent
LOS	Local Ordering System			
LSR	Local Service Request			
MARCH	Memory Administration Recent Change	Line Side Recent Change Switch Translations	SOAC, and COSMOS	BCR
MDF	main distribution frame			
MEDIAC	Mediated Access	Customer Gateway to OSS (Electronic Bonding)		LEC
MLT	Mechanized Loop Testing	POTS Copper Loop Testing	LMOS and LFACS	Lucent
NID	Network Interface Device			
NMA/F	Network Monitoring and Analysis/Facilities	Fault Management for Facilities and Transport	TIRKS and NSDB	BCR
NMA/S	Network Monitoring and Analysis/Switch	Fault Management for LDS Switches	TIRKS and NSDB	BCR
NSDB	Network Services Data Base	Corporate Data Base for Customer Services, Network Elements, Facilities, etc.	TIRKS, LFACS, COSMOS/SWITCH	BCR
NTMOS	Network Traffic Management Operations System	Traffic Performance Management and Controls	EADAS	Lucent
OPS/INE	Operations Processor System for Intelligent Network Elements	Recent Change Provisioning for Transmission Network Elements (DCS, SONET ADM, DLC, etc.)	TIRKS and NSDB	BCR
OSS	Operations Support Systems			
PAWS	Provisioning Analyst Work Station	Automated request for manual assistance	FACS	BCR
PICS	Plug-in Inventory Control System	Inventory of Plug-in equipment, channel units, etc.	TIRKS & FEPS	BCR
PLOC	preferred local exchange carrier identifier			
PREDICTOR (ACE/CRAS)	Loop Maintenance System	Loop Performance Monitoring	LMOS	Lucent
PREMIS	Customer DB	Telephone Numbers, line features, customer address, etc.	SOP	BCR
SAI	serving area interface (crossbox)			
SARTS	Switched Access Remote Test System	Testing of Private Line Special Services (DS0, DSO/s, DS1, etc.)	TIRKS & NSDB	Lucent
SNC-2000 EMS	SONET Network Controller Element Management System	Configuration and Fault Management for SONET Add/Drop Multiplexers		Lucent
SOAC	Service Order Analysis and Control			
SOAC	Service Order Analysis and Control	Service Order Gateway Access	SOP, LFACS, COSMOS/SWITCH, MARCH	BCR
SOG	Service Order Generator			
SOP	Service Order Processor	Service Order Process	CCSN, StarRep, etc.	LEC
TDIL	Testing Data Integration Layer	Testing Operation System for Specials and POTS	SARTS and MLT	Lucent
TIRKS	Trunk Inventory Record Keeping System	Inventory and Assignment for Services, Equipment, Facilities, etc.		BCR
TMN	Telecommunications Management Network Architecture			
TNM	Total Network Management	Switch Surveillance/Fault Management		Lucent
TPM	Transactions Per Minute			
TQM	total quality management			
TSR	Total Service Resale			
TUF	Translator of USOC and FID	Translates ASR to USOC and FID	EXACT, SOP	BCR
UNE	Unbundled Network Elements			
WFA/C	Work Force Administration/Control	Work Management, Work Completion, Dispatching, Jeopardies, Time Reporting, etc.	TIRKS, NSDB, WFA/DO, WFA/DI	BCR

BCR = Bel

EXHIBIT RJW 2

Non-Recurring Cost Model
Technical **A**ssumptions **B**inder
(**NTAB**)
Version 2.2

TABLE OF CONTENTS

1. OVERVIEW

1.1 General

The purpose of the Non-Recurring Cost Model Technical Assumptions Binder (***NTAB***) is to further explain the rationale for assumptions made within the Model.

The *Non-Recurring Cost Model (**NRCM**)* develops one time (non-recurring) cost estimates for the tasks and activities that may be performed by an Incumbent Local Exchange Carrier (ILEC) when a Competitive Local Exchange Carrier (CLEC) requests wholesale services, interconnection, and/or unbundled network elements.

Utilizing a forward looking cost methodology, the ***NRCM*** develops a "bottoms-up" estimate of non-recurring costs. A "bottoms-up" cost estimate assembles the real time cost of each activity in a process to arrive at the overall cost of delivering a service. The cost estimates put forward by most ILECs are "top-down", that is, distributing all allowable costs into each service element based on current or past approximations. This is done without consideration for inefficiencies and the need to model forward looking technologies and processes. The ***NRCM*** reflects the individual OSS tasks and activities that may be required to respond to a CLEC request. To the extent feasible, each component has been separately costed.

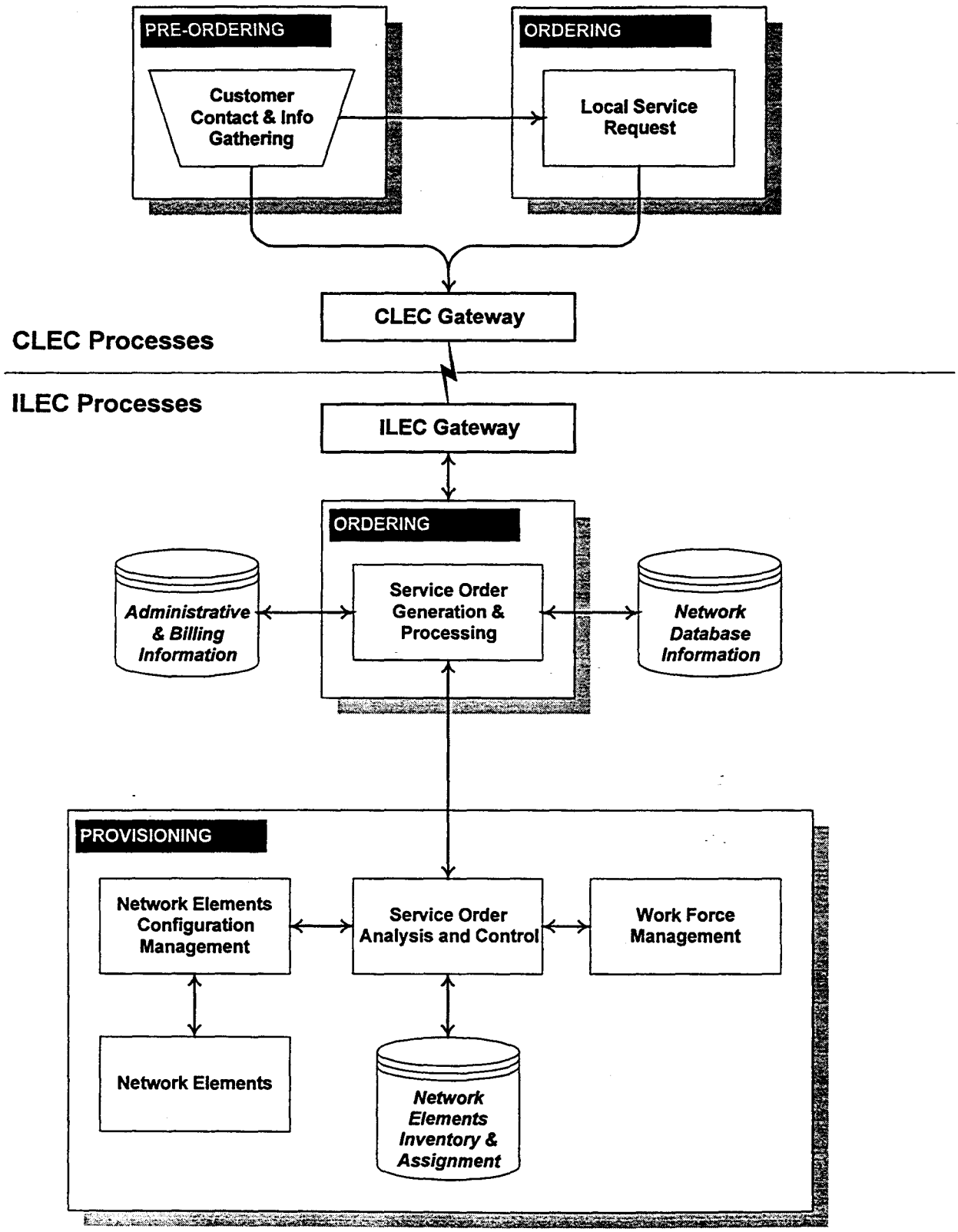
The majority of non-recurring element types involve activities associated with the pre-ordering, ordering and /or provisioning process. A short description of these processes follows:

Pre-ordering: The process by which a CLEC interfaces with customers to determine customer needs. A CLEC and ILEC exchange necessary information to initiate orders. This information, such as customer premise address, phone number availability, feature availability and service availability is made accessible to CLECs electronically so they can accurately respond to customers when taking service and feature orders.

Ordering: The process by which a CLEC electronically submits a Local Service Request (LSR) to an ILEC via an electronic gateway. The ILEC responds electronically with a positive confirmation of order acceptance.

Provisioning: The process by which an ILEC, after receipt of an LSR order, performs the necessary functions to provide the service, interconnection, or Unbundled Network Elements (UNE) requested by a CLEC. Provisioning is a coordinated combination of "Steps" involving various provisioning process systems and/or workforce groups. Technicians can be involved in analyzing the Service Orders, connecting elements, testing circuit segments, resolving problems (Fallout), and closing out the orders

These processes are depicted in the high-level chart on the next page.

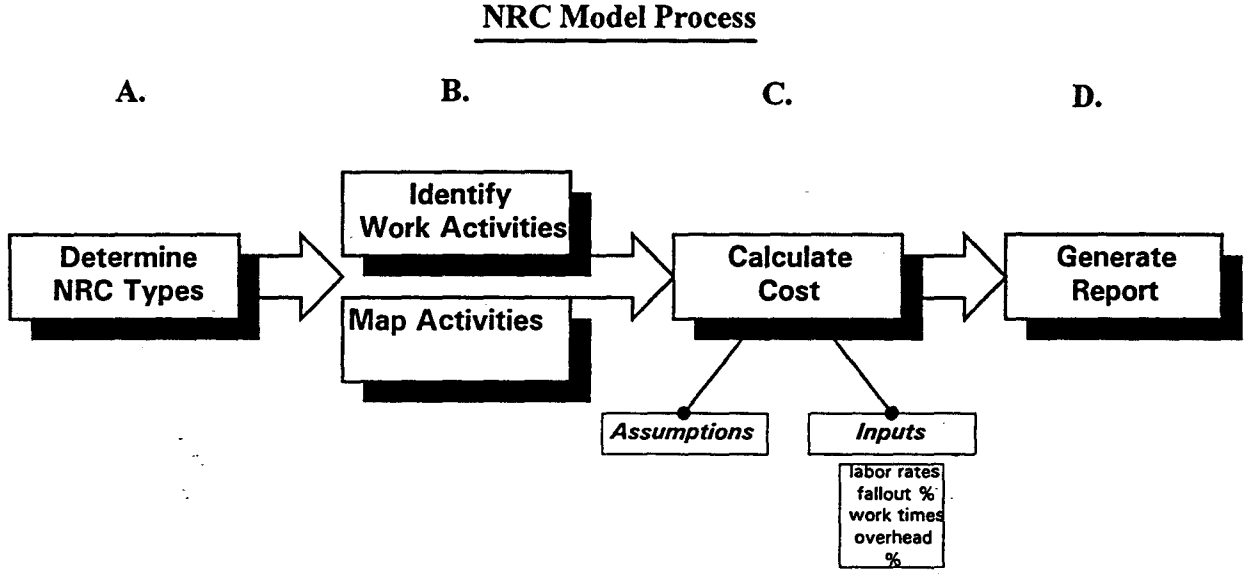

PRE-ORDERING
Customer Contact & Info Gathering
ORDERING
Local Service Request
CLEC Gateway
CLEC Processes
ILEC Processes
ILEC Gateway
ORDERING
Administrative & Billing Information
Service Order Generation & Processing
Network Database Information
PROVISIONING
Network Elements Configuration Management
Service Order Analysis and Control
Work Force Management
Network Elements
Network Elements Inventory & Assignment

In summary, the ***NRCM*** provides a detailed step-by-step understanding of the systems required and the manual work activities performed by an ILEC in the ordering and provisioning of wholesale services and unbundled network elements. The model is designed to reflect the most efficient management and operations of existing ILEC OSSs. The ***NRCM*** also reflects forward looking technology that is available in the market.

The ***NTAB*** explains and or defines in more detail issues such as technical assumptions based on *subject matter experts' estimates, fallout, labor rates, OSS forward looking architecture, flow through, dedicated facilities* and each of the *element types* to name but a few. Each specific Model input variable is addressed in detail within the ***NTAB.***

1.2 NRCM Methodology

As shown by the following chart, the ***NRCM*** develops costs in four distinct stages:



A. Determine Non-Recurring Cost Element Types:

The NRC element types that were initially selected for calculation by the model were developed based on a review of the charges proposed by ILECs during negotiation and arbitration proceedings. These NRC element types consist primarily of functions performed in the provisioning of service to existing customers (**migration**)[1] and to new customers (**installation**)[2].

1 Migration is defined as moving existing ILEC customers to a CLEC.

2 Installation is defined as the establishment of service for a CLEC customer that is not currently served by an ILEC. Service may be for an existing or new customer premise.

The following element types have been added to the NRCM (Version 2.2);

- *"DS1 Interoffice Transport Disconnect"*
- *"DS3 Interoffice Transport Disconnect"*
- *"DS3 Loop to Customer Premise Migration"*
- *"DS3 Loop to Customer Premise Install"*
- *"DS3 Loop to Customer Premise Disconnect"*

The *Telecommunication Act of 1996* explicitly allows new entrants to provide local telecommunication services by means of various connectivity options. To the extent these options cause different costs to be incurred, such costs are modeled separately within the NRC Model. The local connectivity options include:

Total Services Resale (TSR): ILEC acts as a wholesaler of local telephone service which the CLEC then resells to end user customers.

Unbundled Network Elements Platform *(UNE-P):* CLEC purchases unbundled network elements in combination from the ILEC at cost-based rates.

Unbundled Network Elements (UNE): CLEC purchases individual unbundled network element(s), e.g., unbundled network element-loop (UNE-Loop), from an ILEC that may be used alone or in combination to provide telecommunication services to CLEC end user customers.

One example of an element type developed by the ***NRCM*** is a "*POTS/ISDN Migration -UNE-P.* This element type represents the situation where an existing POTS or ISDN customer changes its local service provider from an ILEC to a CLEC, and the CLEC serves the customer by purchasing the unbundled network elements in combination (UNE-P).

Within the model, the user has the ability of either costing individual element types or batch processing a user selected list of element types all at once.

B. Identify and Map Activities:

The ***NRCM*** identifies the individual systems utilized and manual work activities performed, when an ILEC provides a non-recurring service. These activities are considered generic for the ILEC and fall primarily within the pre-ordering, ordering and provisioning processes. See **Attachment C** for a complete list and description of the activities included in the model.

The model then maps the appropriate set of work activities to each NRC element type. For example, to migrate a POTS customer under the UNE-P option, requires nineteen identified work activities. The logic of the *NRC Model* maps these activities to the NRC element type through an assignment table contained on the "*Process & Calcs*" sheet of the *NRC Model.*

As demonstrated in the following table excerpt, activity assignment is made by the placement of an "X" at the table intersection of activity and NRC element type. (Note: while some activities are generic to many NRC element types, others are specific to only a few.)

ID No.	Process Flow / Activity	1 POTS / ISDN BRI - Migration - TSR	3 POTS / ISDN BRI - Migration - UNE - Platform	49
1	***Pre Order Steps***	X	X	
2	CLEC customer contact	X	X	
3	CLEC requests customer address data, CSR, and appointment from ILEC	X	X	
4	ILEC gateway requests address data from Administrative Information System and CSR	X	X	
5	ILEC gateway formats and returns address, CSR, and appointment data to CLEC			
6	***Ordering Steps***	X	X	
7	CLEC customer service representative inputs LSR information into LOS	X	X	
8	ILEC gateway receives, validates and logs LSR, returns FOC, and passes LSR to SOG	X	X	
9	CLEC gateway sends LSR to EXACT			
10	ILEC SOG retrieves CSR data, formats and passes to SOP	X	X	
11	***Provisioning Processing Steps***	X	X	
12	EXACT and TUF sends request to SOP			
13	SOP sends request to SOAC	X	X	
14	SOAC analyzes order, generates assignment requests for OSP, COE, IOF, etc.	X	X	
....				

When a user of the model chooses to cost out a particular NRC element type, the model selects the column corresponding to that NRC element type and looks for the activities that are required to be performed. If an "X" is shown, the activity in that row is required. In the table shown above, for example, a *POTS Migration* under the TSR connectivity option requires steps 2, 3, 4, 7, 8, 10, 13, and 14. (Note: this is only a sample of activities required for this element type).

For each activity described above, the model incorporates costing inputs. These inputs include the probability of the activity's occurrence, the time to complete the work activity, and the labor rate associated with the work activity. The model then calculates the cost of each individual activity based upon these inputs and model assumptions.

C. Calculate Costs:

The third stage of the model calculates the cost of each activity and process. The ***NRCM*** uses advanced features of Microsoft Excel 7.0 including Visual Basic for Applications (VBA) macros and dialog boxes. The User Guide, which is a separate document, contains additional information on how to run the model.